

well as by night, usually late in the afternoon and at dusk. Its note is a continuous, snapping *z-z-z-z-z-z-z-z-z*, not nearly as loud as that of *C. fusco-striatus* of the South.

The stridulations of *Conocephalus eusinger* Harris are intermittent notes—*tzip-tzip-tzip-tzip-tzip*, rapidly repeated for indefinite periods. I have found this *Conocephalus* very common at Oxford, Massachusetts. Here it occurs in colonies in the tall grass in the wet meadows, and sings almost entirely at night. The notes of a colony of these insects intermingle to produce a veritable din during the warm summer nights.

I captured a number of individuals of *Conocephalus mexicanus* Saussure at Thompson's Mills, north Georgia, in the tall grass of wet bottom lands. I have not heard the stridulations of this species, which are said to be very loud.

The locust *Pyrgocorypha uncinata* Harris, which, in general appearance, resembles *Conocephalus*, also occurs at Thompson's Mills, although I have taken only a single male, and know nothing concerning its stridulations.

The species of *Conocephalus* are almost strictly terrestrial, although at Thompson's Mills, on one or two occasions, I have traced the loud notes of some probable species to the crowns of young pines.

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## NEW GENERA AND SPECIES OF NORTH AMERICAN DIPTERA.

By D. W. COQUILLET.

Family ASILIDÆ.

*Dasyllis semitecta*, new species.

Black, the tarsi brown, the pulvilli and bases of the claws yellow. Hairs black, dorsum of abdominal segments two to six densely covered with light yellow hairs, narrow apices of femora, both ends of tibiæ, and whole of the tarsi with whitish hairs. Wings grayish hyaline, the veins bordered with brown.

Length, 19 mm.

Winnipeg, Canada. A female specimen collected June 1, 1908, by Mr. J. B. Wallis.

*Type*: No. 13089, U. S. National Museum.

Family EMPIDIDÆ.

*Clinocera genualis*, new species.

*Female*.—Near *binotata*, but the entire face is silvery, the vein at the base of the third posterior cell is curved and very oblique, etc. Black,

only the apices of the femora reddish-yellow. Face separated from the cheeks by a wide notch, arista longer than the antennæ proper. Front, mesonotum, and scutellum olive-brown pruinose, mesonotum without acrostichal bristles, marked with a dorsal pair of black vittæ, scutellum bare except for the apical pair of bristles; metanotum, pleura, venter, and sides of abdomen olive-gray pruinose, middle of dorsum of abdomen brownish. Femora devoid of long bristles and hairs. Wings grayish hyaline, a brown cloud on vein at base of second submarginal cell and another at apex of discal cell; only two submarginal cells, anal cell much shorter than the second basal, the sixth vein prolonged far beyond the apex of the anal cell.

Length, nearly 3 mm.

Banff, Canada. A single specimen collected by Mr. N. B. Sanson.

*Type*: No. 13090, U. S. National Museum.

#### Family DOLICHOPODIDÆ.

#### *Tachytrechus junctus*, new species.

*Male*.—Arista simple, tip of fourth vein near that of the third and far from the extreme apex of the wing. Antennæ yellowish, the third joint subelliptical, blackened at its apex, arista black, bare; face descending to lower end of the eyes, whitish pruinose, tinged in places with yellow; upper occipital bristles black, the others whitish. Body violaceous and green, the humeri, notopleura, pleura, and sides of abdomen whitish pruinose, scutellum two-bristled, last segment of the hypopygium polished black, the lamellæ black, subcordate, wider than long. Halteres and calypteres yellow, bristles of the latter black. Legs black, outer side of front tibiæ on the lower three-fourths whitish, knees of front and middle legs, middle and hind tibiæ except at apex, and first joint of front and middle tarsi except apically, yellowish; front tibiæ noticeably thickened, first joint of their tarsi as long as the remaining joints together, third joint of middle tarsi narrowed and bent on the basal portion, first two joints of hind tarsi subequal in length, legs devoid of long hairs. Wings hyaline, hind margin even, costa not thickened.

Length, 5 mm.

Manahawkin, New Jersey. A male specimen collected September 5, 1909, by Mr. H. S. Harbeck.

*Type*: No. 13091, U. S. National Museum.

#### Family SYRPHIDÆ.

#### *Sphegina petiolata*, new species.

*Male*.—Near *lobata*, but with a much more slender abdomen, tricolorous hind femora, etc. Head black, face and cheeks pale yellow, anten-

næ reddish yellow varied with brown. Thorax black, the humeri and a large spot at insertion of wings reddish yellow; scutellum black, the sides reddish yellow. Abdomen dark brown, varied with reddish yellow, a pale yellow band beyond the middle of the second segment and another at the base of the third; second segment elongate and slender, over five times as long as its greatest width. Legs pale yellow, last two tarsal joints, the first joint of the hind tarsi, and a submedian and apical band on the hind tibiæ brown; apical four-fifths of the hind femora brown, a wide postmedian band and the narrow apex reddish yellow. Wings hyaline, gray at the apex.

Length, 6 mm.

White Mountains and Franconia, New Hampshire. Two males, one of them collected by Mrs. Annie T. Slosson.

*Type*: No. 13092, U. S. National Museum.

### **Xylota facialis**, new species.

*Male*.—A rather robust species, near *memorum*, but the lower two-fifths of the face, except on the sides, is yellow in ground-color. Head black, the lower portion of the face, except laterally, yellow; antennæ black, the third joint brown, subelliptical, wider than long. Thorax bronze green, marked with four purple vittæ. Abdomen opaque black, the first segment polished, the second and third each with a pair of polished yellow subquadrate spots, the fifth wholly polished bronze green. Legs black, bases of tibiæ and of the first two pairs of tarsi yellow; hind femora much thickened, hind coxæ unarmed. Wings grayish hyaline, the stigma dark yellow.

Length, 10 mm.

Pequaming, Michigan. One specimen, collected by Mr. Morgan Hebard.

*Type*: No. 13093, U. S. National Museum.

## Family TACHINIDÆ.

### **PETIA**, new genus.

Near *Apinops*, but the first posterior cell is closed and with a petiole one and one-half times as long as the hind cross-vein, etc. Head in profile one and one-half times as high as long, the horizontal diameter at the vibrissæ; scarcely shorter than at base of antennæ; ocellar bristles minute, proclinate, frontals descending to middle of second antennal joint, an irregular row of bristles outside the frontals, only one pair of verticals; antennæ reach five-sixths of distance to the oral margin, the third joint slightly longer than the second; arista bare, the penultimate joint shorter than broad; vibrissæ inserted on a line with the anterior oral margin, three or four bristles above each, sides of face bare, unus-

ually narrow; eyes bare, cheeks about one-seventh as wide as the eye-height, proboscis robust, less than half as long as height of head, palpi wanting. Wings narrow, of nearly an equal width, veins bare, the third terminates at the extreme wing-tip, hind cross-vein nearer to the small than to the bend of the fourth vein, small cross-vein at three-fourths of the length of the discal cell, noticeably beyond the apex of the first vein. Abdomen without bristles, except a few weak ones on the fourth segment. None of the tibiæ ciliate.

*Type:* The following species:

***Petia calva***, new species.

*Male.*—Black, the antennæ, face, cheeks, and lower part of the occiput yellow, proboscis yellowish brown. Front three-fourths as wide as either eye, arista thickened on the basal fourth. Body not pruinose, except on the pleura; two postsutural dorsocentral bristles and two sternopleurals: hypopygium very large. Wings smoky brown from base to apex of second vein, whitish hyaline beyond this. Pulvilli of front tarsi much shorter than the last joint.

Length, 3.5 mm.

Moscow, Idaho (J. M. Aldrich), and San Pedro, California. Two specimens.

*Type:* No. 13094, U. S. National Museum.

**PHYTODES**, new genus.

Near *Neophyto*, but the petiole of the first posterior cell is about as long as the hind cross-vein, the abdomen is without discal bristles, etc. Ocellar bristles proclinate, frontals not descending below base of antennæ, face strongly retreating below, the sides bare, except the upper outer corner, which is sparsely covered with short hairs, this area limited below by a row of bristles extending from near apex of antenna obliquely to slightly below the eye: cheeks as wide as the eye height; eyes bare: antennæ reaching about one-fourth of distance to the oral margin, the third joint subequal in length to the second, arista bare, the penultimate joint shorter than long, facial depression extending less than half-way to the oral margin, vibrissæ inserted at about one-third of distance from oral margin to base of antennæ; proboscis very short, robust, palpi invisible in the single specimen before me (doubtless retracted with, and concealed by, the proboscis). Veins, except the third, bare, the third terminates a short distance above the extreme wing-tip, hind cross-vein nearer to the small than to the bend of the fourth vein, the latter rectangular and with an indistinct fold continuation.

*Type:* The following species:

***Phytodes hirculus***, new species.

*Female.*—Black, the frontal vitta reddish brown, first two joints of antennæ yellowish, the bare upper part of the face, crossing the upper

part of the cheeks, golden yellow. Front twice as wide as either eye, two pairs of orbital bristles, the anterior pair proclinate, the other reclinate; arista considerably thickened at the base. Body grayish pruinose, three pairs of postsutural dorsocentral bristles, two sternopleurals, scutellum bearing three marginal pairs, second segment of abdomen with marginal pair, the following two with a marginal row. Wings smoky, especially along the costa, third vein bristly almost to the small cross-vein. Tibiæ not ciliate.

Length, nearly 5 mm.

Victoria, Texas. A single specimen collected by Mr. A. L. Quaintance.

*Type*: No. 13095, U. S. National Museum.

#### TETROPSIS, new genus.

Near *Hilarella*, but the antennæ reach only two-thirds of distance to the oral margin, the first posterior cell is closed and with a petiole three-fourths as long as the hind cross-vein, etc. Head in profile subquadrate, ocellar bristles proclinate, frontals one-rowed, not descending below base of antennæ, facial ridges and sides of face bare, vibrissæ on a level with the oral margin, cheeks one-fourth as wide as the eye-height, eyes bare, third joint of antennæ only slightly longer than the second, arista bare, scarcely longer than the antennæ, the penultimate joint slightly longer than wide; proboscis beyond the articulation shorter than height of head, palpi present. Veins bare, except the base of the third, this vein ends about half-way between apex of the second and the extreme wing-tip; hind cross-vein midway between the small and the bend of the fourth, the latter angular and without an appendage.

*Type*: The following species:

#### *Tetropsis modesta*, new species.

*Female*.—Black. Head gray pruinose, becoming yellowish on the upper part of the front; front nearly twice as wide as either eye, frontal vitta greatly widening above, yellowish pruinose, except a median vitta and the lowest third, two pairs of orbital bristles. Arista thickened on basal half, thence gradually tapering to the tip. Body yellowish-gray pruinose, the first abdominal segment somewhat polished, the broad apices of the remaining segments polished. Three postsutural dorsocentral bristles, two sternopleurals, two marginal pairs on the scutellum, first two abdominal segments without distinct bristles, the following two with a marginal row. Wings hyaline, third vein bristly half-way to the small cross-vein. Calypteres white. Tibiæ not ciliate, front tarsi noticeably dilated on the last four joints, the claws and pulvilli very short.

Length, 4 mm.

Clementon, New Jersey. Three specimens collected by Mr. H. S. Harbeck.

*Type*: No. 13096, U. S. National Museum.

**Exorista setinervis**, new species.

*Male*.—Differs from *spinipennis*, our only other species in which the third vein is bristled almost to the small cross-vein, by lacking the discal abdominal bristles, by having the arista thickened on only the basal fourth, etc. Black, the palpi yellow. Front one-third as wide as either eye, covered with short bristly hairs, frontals descending slightly below the arista, vibrissæ inserted at the oral margin, ridges bristly on the lowest third, cheeks one-eighth as wide as the eye-height, antennæ nearly as long as the face, the third joint five times as long as the second. Thorax gray pruinose and marked with four black vittæ, three pairs of postsutural dorsocentral bristles, two sternopleurals, scutellum bears three marginal pairs. Abdomen polished, bases of the second and third segments bluish-white pruinose, first two segments with a marginal pair of bristles, the following two with a marginal row. Front pulvilli longer than the last tarsal joint, middle tibiæ with only one bristle on the front side near the middle, hind tibiæ not ciliate. Wings hyaline, bend of the fourth vein without a stump. Calypteres white.

Length, 6 mm.

Clarksville, Tennessee. A single specimen collected June 4, 1909, by Mr. A. C. Morgan.

*Type*: No. 13097, U. S. National Museum.

Family HELOMYZIDÆ.

**Leria nebulosa**, new species.

Body black, cross-veins clouded with brown. Head yellowish, sides of the front, the ocellar triangle, and the upper half of the occiput black, covered with a bluish-gray pruinosity; only one vibrissa each side, cheeks on more than the lower half covered with short bristly hairs; antennæ and palpi reddish yellow, proboscis black. Body bluish-gray pruinose, mesonotum marked with five brown vittæ, pteropleura and mesopleura bare, sternopleura densely hairy and with a single bristle; seventh segment of the abdomen reddish yellow. Legs brown, gray pruinose, and tinged in places with yellow. Wings hyaline, small and hind cross-veins clouded with brown. Halteres yellow.

Length, 5 mm.

Banff, Canada. A female specimen collected by Mr. N. B. Sanson.

*Type*: No. 13098, U. S. National Museum.

***Leria pleuralis***, new species.

Near *defessa*, but the hairs of the cheeks are in a single row, the mesopleura posterior to the anterior notopleural bristle is wholly densely haired, etc. Head yellowish, the ocellar triangle and upper part of the occiput black; antennæ and palpi reddish yellow, proboscis brownish; only one vibrissa each side. Body black, slaty-gray pruinose, abdomen of male largely or wholly yellowish, mesonotum not vittate; pteropleura bare, mesopleura without bristles, sternopleura densely haired and with a single bristle. Legs yellowish, apices of tarsi brown. Halteres yellow. Wings hyaline, slightly yellowish at the base.

Length, nearly 4 mm.

Alaska, and Beulah, New Mexico (May 3, 1902, T. D. A. Cockerell). Three specimens.

*Type*: No. 13099, U. S. National Museum.

***Leria nuda***, new species.

One vibrissa each side, cheeks with a single row of hairs near the lower edge, mesopleura bare, except on the upper hind corner, which bears a bristle and several hairs, pteropleura bare, sternopleura with two bristles and a few hairs. Head yellowish, upper part of the occiput black, gray pruinose; antennæ and palpi yellow, proboscis yellowish brown. Body black, yellowish-gray pruinose, the mesonotum not vittate. Legs and halteres yellow. Wings hyaline, the veins yellow.

Length, 3 mm.

Claremont, California (C. F. Baker), and Santa Fe, New Mexico (July, T. D. A. Cockerell). Two females.

*Type*: No. 13100, U. S. National Museum.

***Leria genalis***, new species.

One vibrissa each side, cheeks with a single row of hairs near the lower edge, mesopleura without bristles, bare except on the lower hind corner, which bears several hairs, sternopleura rather thickly haired and with one bristle, pteropleura bare. Head yellowish, the ocellar triangle and upper part of the occiput black; antennæ reddish yellow, the third joint, except basally, brown; palpi yellow, proboscis yellowish brown. Body black, bluish-gray pruinose, mesonotum marked with five indistinct brown vittæ. Legs yellow, apices of tarsi brown. Halteres yellow. Wings hyaline, tinged with yellow basally and in the subcostal cell.

Length, nearly 5 mm.

Kaslo, British Columbia. A female specimen collected by Dr. H. G. Dyar.

*Type*: No. 13104, U. S. National Museum.

## Family EPHYDRIDÆ.

**Hydrellia atroglauca**, new species.

Recognizable by the picture of the abdomen. Front greenish gray, face white pruinose, cheeks very narrow; antennæ brown, base of the third joint yellow in the male; proboscis brown, the palpi yellow. Body black, mesonotum and scutellum rather thinly olive-gray pruinose, the pleura light bluish gray, dorsum of abdomen opaque brownish black, the broad lateral and apical margins in the male, but only the hind corners of the segments and apex of the abdomen in the female, also the venter in both sexes, light bluish-gray pruinose. Legs black; in the female the front trochanters, all tarsi, and both ends of the tibiæ are yellow. Halteres yellow. Wings hyaline, apex of second vein at about three-fifths of distance from tip of first to that of third vein.

Length, slightly over 2 mm.

Biscayne Bay, Florida. One male and two females collected by Mrs. Annie T. Slosson.

*Type*: No. 13101, U. S. National Museum.

**Hydrellia cruralis**, new species.

Distinguished by the strikingly bicolorous legs. Front brown, face yellow pruinose, cheeks very narrow; antennæ brown, base of the third joint yellow; mouthparts yellow. Body green, thinly gray pruinose, more dense on the pleura. Legs black, the tibiæ and tarsi, except last joint of the latter, also the front trochanters, yellow. Wings hyaline, apex of second vein at about two-thirds of distance from tip of the first to that of the third vein. Halteres yellow.

Length, slightly over 2 mm.

Riverton, New Jersey. A female specimen collected in September, 1909, by Mr. H. S. Harbeck.

*Type*: No. 13102, U. S. National Museum.

## Family AGROMYZIDÆ.

**Phytomyza clemativora**, new species.

Near *palliatæ*, but the mesonotum is marked with four brown vittæ, etc. Yellow, an ocellar dot and the third antennal joint black, four brown vittæ on the mesonotum, the median pair scarcely extending behind its middle. Body somewhat polished.

Length, 1 mm.

Brownsville, Texas. Two specimens, bred from *Clematis* by Messrs. McMillan and Marsh.

*Type*: No. 13103, U. S. National Museum.